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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT PAPER NUMBER

2666

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/747,070	<b>Applicant(s)</b> MCCANN ET AL.	
	<b>Examiner</b> Melanie Jagannathan	<b>Art Unit</b> 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 24 is objected to because of the following informalities: on line 18, "stpred" should be changed to "stored". Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,836,477. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of patent 6,836,477 essentially teaches the same network element as claim 23 of current application. Even though claim 23 of current application is broadened by omitting certain limitations such as the database subsystem controller for accessing at least one of the range and exception-based databases to extract routing information and a routing function for routing data packet to its intended destination using the routing information from claim 1, it has been held that the omission of an element and its function is an obvious expedient if the remaining

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elements perform the same function as before. In re Karlson, 136 USPQ 184(CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended limitation of extracting an originating mobile identification number from mobile application part of message, performing a lookup in an address translation database using the originating mobile identification number is not supported by disclosure of invention. Specification discloses pair of complimenting routing databases which map a mobile identification number associated with a signaling message to the network address of the appropriate HLR or SMSC node. However, there is no mention of the mobile identification number being an originating MIN and Examiner would not be able to come to this conclusion without undue experimentation on the part of the Examiner.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-12, 14-15, 18-19, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Irten et al. US 6,308,075.

Regarding claims 1-2, 6-12, 14, the claimed method for routing message to a short message service center comprising receiving a message having a signaling connection control part and mobile application part, the mobile application part having a mobile identification number is disclosed by a plurality of message centers (Figure 1, elements 10a-10d) interconnected with a SS7 network (element 12) with message centers route short messages between one another by the use of point code/subsystem number and mobile identification numbers from messages. See column 1, column 2, and lines 40-67. The claimed determining an entity type for the message based on signaling connection control part and in response to determining that entity type indicates message is destined for SMSC, performing a lookup in an address translation database using the MIN from mobile application part of message to locate address for SMSC and routing message is disclosed by when short message is received at processing system (Figure 3a, step 20a), a determination is made if destination address is home to local MC (element 10) i.e. if phone number of handset matches a specific profile (Figure 3a,

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step 20c) in local subscriber database (element 14c) and message is forwarded to home MC of destination.

Regarding claim 3, the claimed lookup in an address translation database includes performing a lookup in database indexed by ranges of mobile identification numbers is disclosed by global title translation for MIN-to-MC translation. See column 3, lines 36-39.

Regarding claims 4-5,9-12,14, 21, performing a lookup in a first database indexed by single of mobile identification numbers using the MIN extracted from MAP portion of message and in response to failing to locate the address in first database, performing a lookup in a second database using an entity address extracted from SCCP of message is disclosed by determination made if destination address is home to local MC (element 10) i.e. if phone number of handset matches a specific profile (Figure 3a, step 20c) in local subscriber database (element 14c) and message is forwarded to home MC of destination and if point code/sub-system number is in MC route table (element 14d), short message is routed using PC/SSN or global title translation is attempted for routing using MIN-to-MC translation. Routing is done by first trying one routing technique and then if the other is one is not achievable. See column 3, lines 9-44.

Regarding claims 15, 18-19, Examiner is considering limitations besides for MIN being an originating mobile identification number due to 112, 1<sup>st</sup> rejection above and the rejection is as follows:

Regarding claim 15, the claimed performing a lookup in an address translation database indexed by individual mobile identification numbers using the MIN extracted from MAP portion of message and in response to failing to locate the address in first database, performing a lookup in a range-based database using an entity address extracted from SCCP of message is disclosed

by determination made if destination address is home to local MC (element 10) i.e. if phone number of handset matches a specific profile (Figure 3a, step 20c) in local subscriber database (element 14c) and message is forwarded to home MC of destination and if point code/sub-system number is in MC route table (element 14d), short message is routed using PC/SSN or global title translation is attempted for routing using MIN-to-MC translation. Routing is done by first trying one routing technique and then if the other is one is not achievable. See column 3, lines 9-44.

Regarding claim 18, the claimed signaling messages that require SCCP processing include at least one short message service message and processing module is adapted to route at least one short message service message to SMSC corresponding to mobile identification number extracted from MAP portion is disclosed by when short message is received at processing system (Figure 3a, step 20a), a determination is made if destination address is home to local MC (element 10) i.e. if phone number of handset matches a specific profile (Figure 3a, step 20c) in local subscriber database (element 14c) and message is forwarded to home MC of destination.

Regarding claim 19, the claimed first database indexed by individual mobile identification numbers and second database indexed by ranges of mobile identification numbers, performing a lookup using the MIN extracted from MAP portion of message and in response to failing to locate the address in first database, performing a lookup in a second database using an entity address extracted from SCCP of message is disclosed by determination made if destination address is home to local MC (element 10) i.e. if phone number of handset matches a specific profile (Figure 3a, step 20c) in local subscriber database (element 14c) and message is forwarded to home MC of destination and if point code/sub-system number is in MC route table (element 14d), short message is routed using PC/SSN or global title translation is attempted for routing

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using MIN-to-MC translation. Routing is done by first trying one routing technique and then if the other is one is not achievable. See column 3, lines 9-44.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Irten et al. US 6,308,075. Irten et al. discloses all of the limitations except for first entry in entity type table includes subsystem number value of 8 to an SMSC entity type. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify of point code/sub-system number lookup in table in message center system Irten et al. with SSN value of 8 mapping to SMSC. One of ordinary skill in the art would be motivated to do this for correct routing of short message to message center in a system with a plurality of message centers..



9. Claims 17, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorello et al. US 6,208,270.

Irten et al. discloses determining if destination address matches profile in database and then routing to message center. See column 3, lines 9-44. Irten et al. does not disclose the claimed in response to locating address, inserting an entity address of destination of SMSC in called party address field of message. Lorello et al. discloses a SMS network (Figure 1, element 100) with two or more SMSCs (elements 101 and 101') with a SMS notification message forwarded from one SMSC to another. Each time message is forwarded from one entity to another entity, the origination and destination addresses reflect SMSC forwarding message and SMSC receiving message. See column 8, lines 62-67, column 9, lines 1-5, column 10, lines 59-67, column 11, lines 1-10. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Irten et al. to insert address of destination SMSC into message as in Lorello et al. One of ordinary skill in the art would be motivated to do so for a more reliable and robust method for delivering short messages to a subscriber from a plurality of SMSCs. See column 6, lines 13-22.

***Allowable Subject Matter***

10. Claim 24 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: Prior art of record, in single or in combination, does not disclose in response to failing to locate a matching entry in first lookup, performing a second lookup using SMSC entity address of first

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SMSC stored in SCCP called party address field of SMS message and in response to locating matching entry in second lookup routing the SMS message to first SMSC in combination with other limitations of claims.

### ***Response to Arguments***

11. Applicant's arguments filed 3/16/2005 have been fully considered but they are not persuasive. Applicant argues reference Irten et al. does not disclose amended limitation of routing address translation based on an originating mobile identification number. Examiner contends there is no support in specification of instant application for this limitation and refers Applicant to 112, 1<sup>st</sup> rejection above.

Regarding claim 23, Examiner kindly directs Applicant to double patenting rejection above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ

*mj*



**FRANK DUONG**  
**PRIMARY EXAMINER**